

independent form including all of the limitations of the base claim and any intervening claims.

Applicants wish to thank the Examiner for the identification of allowable subject matter in several of the pending claims.

Applicants respectfully traverse the objection to the drawings. The Examiner has contended that "all the boxes [in the drawings] should be textually labeled." Such a requirement, however, is not found in or supported by 37 C.F.R. 1.83(a). Rather, Rule 1.83(a) merely states that:

conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box).

Thus, as Rule 1.83(a) indicates, the use of labeled representations including, for example, labeled rectangular boxes should be used to illustrate *conventional* features for which a detailed illustration is not essential for a proper understanding of the invention. Applicants respectfully submit that there are no such conventional features shown in the drawings, and therefore, none of the boxes in the drawings require supplemental textual labeling.

Moreover, each box in the drawings has been identified with a reference numeral and/or a textual label. A clear and detailed description exists in the specification for each reference numeral appearing in the drawings. Therefore, Applicants respectfully submit that no additional labeling in the drawings is necessary for one to gain a proper understanding of the invention.

Applicants respectfully traverse the rejection of claims 1, 3, 4, 6-8, and 10 under 35 U.S.C. §102(e) as being anticipated by Maruo et al. for at least the reason that Maruo et al. fails to disclose every claim element. For example, independent claim 1

recites a combination of elements including, *inter alia*, means for inserting and removing one or more motion control processors from a scalable motion controller. Additionally, independent claim 4 recites a combination of elements including, *inter alia*, a scalable motion controller. Maruo et al. fails to disclose a scalable motion controller (e.g., independent claims 1 and 4), and therefore, Maruo et al. necessarily fails to disclose a means for inserting and removing one or more motion control processors from a scalable motion controller (e.g., independent claim 1).

The present invention includes scalable motion controllers. Each scalable motion controller may be configured for stacking such that any number of motion controllers may be stacked together. Further, any number of motion control processors may be disposed on each motion controller. The system of the present invention, therefore, may be scaled such that the number of motion control processors can be tailored to match any specific number of servo motors included in a particular device.

In contrast to the present invention, Maruo et al. fails to teach a scalable motion controller. Rather, Maruo et al. discloses a motion control system in which the number of motion controllers and the number of motion control processors is fixed. Specifically, the device of Maruo et al. includes a control driver 22 that includes drive circuits 33-36 for driving respective motors 28-31. The number of drive circuits, the number of motors, and the number of control drivers in the device of Maruo et al. is fixed, and Maruo et al. fails to disclose, or even suggest, scaling the motion controllers by modifying the number control drivers 22 or the number of elements included in control driver 22 to match a varying number of motors. For example, Maruo et al. fails to disclose or suggest any connector elements on control driver 22 that would allow multiple control drivers 22 to be stacked together. Further, Maruo et al. fails to disclose or suggest

modifying the number of driver circuits 33-36 to match a particular number of motor-encoders.

Rather than anticipating the present invention, the device of Maruo et al. falls squarely within the description of the prior art provided in the present application. (p. 3, ¶15). The device of Maruo et al., like the described prior art, fails to offer the capability of purchasing and using only the number of processors needed for a particular project.

Because Maruo et al. fails to disclose every claim element, the Section 102(e) rejection of claims 1, 3, 4, 6-8, and 10 is improper and should be withdrawn.

Applicants respectfully traverse the rejection of claims 13 and 14 under 35 U.S.C. §102(e) as being anticipated by Brekosky et al. for at least the reason that Brekosky et al. fails to disclose every claim element. For example, independent claim 13 recites a combination of elements including, *inter alia*, a plurality of dip sockets arranged for inserting and removing one or more motion control processors.

While the Examiner has contended that dip sockets 30 are included in the device of Brekosky et al. "for inserting/removing different types of controllers," Brekosky et al. fails to disclose a plurality of dip sockets arranged for inserting and removing one or more motion control processors. In the device of Brekosky et al., "terminal receiving cavities 30" are provided on connectors 4, 6, 14, 15, and 16, for example, only for receiving the male terminals 32 of other connectors 4, 6, 14, 15, or 16. In other words, terminal receiving cavities 30 are provided in the device of Brekosky et al. for the sole purpose of enabling stacking of multiple circuit boards. (col. 3, lines 11-20; col. 4, lines 15-19). Brekosky et al., which fails to even discuss motion control processors, fails to disclose inserting or removing motion control processors from terminal receiving cavities 30.

Because Brekosky et al. fails to disclose every claim element, the Section 102(e) rejection of claims 13 and 14 is improper and should be withdrawn.

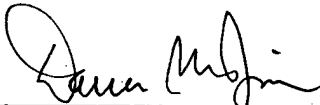
Applicants respectfully traverse the rejection of claims 2, 5, and 9 under 35 U.S.C. §103(a) as being unpatentable over Maruo et al. in view of Brekosky et al. No *prima facie* case of obviousness has been established with respect to claims 2, 5, and 9 for at least the reason that no combination of Maruo et al. and Brekosky et al. teaches or suggests every claim element. As noted above, Maruo et al. fails to disclose at least a scalable motion controller, as included in independent claims 1 and 4, from one of which claims 2, 5, and 9 depend. Like Maruo et al., Brekosky et al. also fails to disclose a scalable motion controller. Further, neither reference even mentions or suggests a scalable motion controller. For at least this reason, no *prima facie* case of obviousness has been established with respect to claims 2, 5, and 9. Accordingly, the Section 103(a) rejection of these claims is improper and should be withdrawn.

In view of the foregoing remarks, Applicants respectfully request reconsideration and reexamination of this application and timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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